

REMARKS

Applicant, his principal representative in Germany, and the undersigned have carefully reviewed the second, non-final Office Action of September 12, 2003 in the above-identified U.S. patent application, together with the prior art cited and relied on by the Examiner in the rejections of the claims. In response, the specification and claims of the application have been amended a second time to more clearly patentably define the subject invention over the cited prior art. It is believed that the claims now pending in the application are patentable. Reexamination and reconsideration of the application, and allowance of the claims is respectfully requested.

The subject patent application discloses and claims a method for producing multicolor printing using printing plates that are provided digitally with images and/or print. A forme cylinder is adapted to receive the printing plates that will accomplish the printing. During such printing, these plates are attached to the forme cylinder. As recited in claim 1, the printing plates that have been used in a previous printing task are removed from the forme cylinder. These removed plates are conducted from the forme cylinder to a printing plate neutralizing device which is spaced from the forme cylinder. The plates now at the plate neutralizing device are neutralized by having the previously used images and print removed from them. Once the plates have been neutralized by the plate neutralizing device, they have a coating applied to them. The plates with the newly applied coating are then secured to a printing plate exposure and development unit. New images and print are applied to the neutralized and newly coated plates. The

neutralized and coated plates, that have now been provided with new images and print are then returned to the forme cylinder. Once they have been returned to the cylinder, they are then re-applied to the cylinder.

In the Office Action of September 12, 2003, the Examiner rejected claim 1 under 35 U.S.C. 102(b) as being anticipated by newly cited U.S. patent No. 4,116,715 to Smiggen. Claims 3 and 9 were rejected under 35 U.S.C. 103(a) as being unpatentable over Smiggen. Claim 5 was rejected as being unpatentable over Smiggen in view of newly cited U.S. patent No. 6,510,795 to Detmers. Claim 7 was rejected as being unpatentable over Smiggen in view of previously cited EP document No. 0940252 to Verlinden.

During a review of the specification of the subject application in the course of the preparation of the subject Amendment it was noted that paragraph 0011 included "means" language similar to that which was replaced in paragraph 0012 in the prior Amendment. Paragraph 0011 is corrected in this Second Amendment to remove the "means" language. These minor changes do not constitute any new matter. Entry of replacement paragraph 0011 is respectfully requested.

The Examiner's rejection of amended claim 1, as presented in the Amendment of June 24, 2003, as being anticipated by Smiggen has been carefully reviewed. The Examiner's rejection of this claim is respectfully traversed for the following reasons.

Initially, it is noted that Smiggen is directed to a method for removing photopolymers from metal substrates. The developed photopolymer layer is removed

from a support substrate of a printing plate by immersion of the layer in boiling water.

The swollen layer is then scraped off the plate.

The Examiner asserts that Smiggen teaches the removal of the printing plates from the forme cylinder and points to Column 3, lines 14-18 for support. In fact, Smiggen is silent on the subject and indicates only that the photopolymer layer on a printing plate may be completely removed. This is accomplished by exposing the layer to hot water for a period of time. Column 3, lines 24-26 of Smiggen discusses "immersion of the plate in boiling water." There is no teaching or suggestion that the plate is removed from the cylinder prior to such immersion.

In a similar manner, the Examiner asserts that Smiggen teaches the provision of a printing plate neutralizing device useable to remove images and print from used printing plates. Column 1, lines 36-39 of Smiggen are relied on. In fact, that portion of the Smiggen patent recites that the developed photopolymer layer is removed by exposing it to hot water for a sufficient time to swell the layer and then scraping the layer from the substrate. The portion of Smiggen relied on by the Examiner makes no mention of a printing plate neutralization device that is separate from the forme cylinder. In Smiggen all that is taught is that the layer is exposed to hot water. Such exposures could be accomplished by simply pouring hot water over the layer while the plate, on which the layer is formed, is supported on a cylinder. Smiggen thus does not teach or suggest this claimed aspect of the subject invention.

Smiggen was further cited as providing a printing plate exposure and development unit, at Column 1, line 48. In fact, Smiggen recites that the cleaned plate can be provided in a state of sufficient smoothness for repeated deposition of photopolymer for subsequent development. Smiggen does not teach or suggest a printing plate exposure and development unit. Instead, Smiggen teaches that the plate is rendered in a state of sufficient smoothness for deposition of photopolymer for future development. There is no teaching or suggestion in Smiggen of an exposure and development unit.

In the rejection of claim 1, it was asserted that Smiggen teaches securing the neutralized and coated plates in proper registration in an exposure and development unit. This was noted as being disclosed at Column 3, lines 1-13. That portion of the Smiggen reference discussion how components of a printing plate are polymerized by exposure to light. The plate is subsequently developed with water. There is no teaching or suggestion in Column 3 lines 1-13 of the provision of an exposure and development unit. There is no teaching or disclosure of securement of a plate to such a unit in proper registration.

Smiggen recites, at Column 3, lines 17 and 18, that the metal substrates may be recycled for repeated use. There is no teaching or suggestion, at Column 3, lines 17 and 18 of reapplication of a neutralized and coated printing plate, with new images and print to a forme cylinder. Lines 17 and 18 of Column 3 of Smiggen merely recite that after printing, the metal substrates may be recycled for repeated use.

Smiggen does not anticipate, or render obvious the method recited in amended claim 1, for the reasons set forth above. there is no teaching or suggestion in Smiggen of plate removal; there is no teaching or suggestion in Smiggen of a separate printing plate neutralizing device; there is no teaching or suggestion in Smiggen of a printing plate exposure and development unit on which a neutralized and coated plate can be placed in proper registration; there is no teaching or suggestion in Smiggen of the reapplication of the neutralized and coated plate, with new images and print to the forme cylinder. Thus Smiggen neither anticipates nor renders obvious the invention recited in currently amended claim 1.

Claims 3 and 9 depend from believed allowable claim 1 and are thus also believed to be allowable. Claim 3 recites the provision of a registration system for the printing plate and the use of such a registration system to secure the plates in proper registration on the exposure and development unit. Contrary to the Examiner's statement, it is not obvious that one would use a registration system for the printing plate that would place the plates on the exposure and development unit in proper registration. Registration is determined in the context of the product being printed. It would not be obvious to use a registration system for the printing plate to properly secure the plate on the separate exposure and development unit. Claim 9 further recites a separate registration system for the exposure and development unit and the use of both registration systems to secure the plate in proper registration on the exposure and development unit.

Claim 5 recites the use of an automatic plate changing device for removing and re-applying the plate to the forme cylinder. There is no reason why one would use the plate changing device of Detmers with the method of Smiggens. There is no teaching or suggestion in Smiggens of plate removal. Thus, there is no reason to combine Detmers with Smiggen.

Claim 7 of the subject application recites the use of a laser neutralization method. Verlinden, at Column 8, lines 15-19 discusses removal of a coating by a brush, a scraper, a water jet, by liquid carbon dioxide or an automatic solvent wash. There is no discussion of the use of a laser beam for neutralization of a used printing plate. Also, since claim 7 depends from believed allowable claim 1, it is also believed to be allowable.

SUMMARY

The specification of the application has been amended a second time to remove improper language. No new matter is being added.

Claim 1 has been amended. Claims 3, 5, 7 and 9 are carried forward. Claims 2, 4, 6, 8 and 10 were previously cancelled.

It is believed that all of the claims now pending in the subject application are patentable over the prior art cited and relied on by the Examiner, taken either singly or in combination. Allowance of the claims, and passage of the application to issue is respectfully requested.

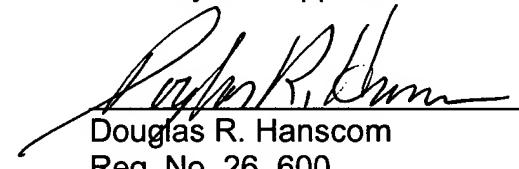
Respectfully submitted,

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